Detection of CYP3A2 in Formalin-Fixed, Paraffin-Embedded Rat Tissue

Reagent and Antibody Information

1X Wash Buffer 3% Hydrogen Peroxide 1% BSA Diluent 1X Citrate Buffer DAB Chromagen Hematoxylin

Blocking Solution: Dakocytomation Protein Block Serum-Free Ready-To-Use Dakocytomation Corporation Carpinteria CA 93013 www.dakousa.com 1-800-235-5763 Code No. X0909

Avidin / Biotin Blocking Kit Vector Laboratories, Inc. Burlingame, CA 94010 <u>www.vectorlabs.com</u> 1-800-227-6666 Catalog # SP-2001

Primary Antibody: Rabbit Anti-Rat Cytochrome P450 CYP3A2 Polyclonal Antibody Chemicon International, Inc Temecula, CA 92590 www.chemicon.com 1-800-437-7500 Catalog # AB1276

<u>Negative Control Serum: Normal Rabbit Serum</u> Jackson Immunoresearch Laboratories, Inc. West Grove, PA 19390 <u>www.jacksonimmuno.com</u> 1-800-367-5296 Catalog # 011-000-001

<u>Staining Kit: LSAB+ System-HRP</u> Dakocytomation Corporation Carpinteria CA 93013 <u>www.dakousa.com</u> 1-800-235-5763 Code No. K0690

Note: This kit includes reagents needed for the secondary antibody (link) and label complex.

Staining Procedure

Positive Control Tissue: Liver (upregulated by treatment) Stain Localization: Cytoplasmic

1. Deparaffinize and hydrate slides through the following solutions:

Solution	Repetitions	Time
Xylene	2 times	5 minutes
100% Ethanol	2 times	3 minutes
95% Ethanol	2 times	3 minutes
1X Wash Buffer	2 times	5 minutes

- 2. Quench endogenous peroxidase by placing the slides in 3% hydrogen peroxide for 15 minutes.
- 3. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- 4. <u>Heat-Induced Epitope Retrieval Using The Decloaker</u> Add 500 ml of distilled water to the pan inside the decloaker. Place a full rack of slides into a Tissue Tek® container with 200 ml of 1X citrate buffer (Insert blank slides into any empty slots in the rack to ensure even heating of slides) Place the container stably inside the pan and decloak for 5 minutes. *Maximum Pressure* ______ Depressurize for 10 minutes. Remove pan top and cool for 10 minutes. *Temperature Before Cooling Slides*______ Rinse the slides in 2 changes of distilled water for 3 minutes each time.
- 5. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each time.
- 6. Block with the Dako Protein Blocking Reagent for 10 minutes at room temperature. Lot #_____ Exp Date_____

DO NOT RINSE THE SLIDES. CONTINUE TO AVIDIN-BIOTIN BLOCK.

7. <u>Avidin / Biotin Blocking Kit</u> Lot #_____ Exp Date_____ New Kit: yes / no Apply avidin block for 15 minutes at room temperature. Quick rinse in 1X Wash Buffer. Apply biotin block for 15 minutes at room temperature.

DO NOT RINSE SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY. ONLY WIPE EXCESS BUFFER.

8. Apply the primary antibody at a 1:300 dilution, and incubate for 1 hour at room temperature. Lot #_____ Date Aliquoted_____ For negative control slides, dilute the protein concentration of the normal rabbit serum to match that of the primary antibody. Make a 1:300 dilution from this normalized serum, and apply to the slides. Incubate for 1 hour at room temperature.

Lot #_____ Date Reconstituted_____

9. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.

LSAB+ Kit Lot # _____ Exp Date_____

- 10. Apply the Link (yellow bottle) from the LSAB+ Kit, and incubate for 30 minutes at room temperature.
- 11. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- 12. Apply the Label (red bottle) from the LSAB+ Kit, and incubate for 30 minutes at room temperature.
- 13. Rinse the slides in 2 changes of 1X Wash Buffer for 5 minutes each.
- 14. Apply the DAB chromagen, and incubate in the dark for 6 minutes at room temperature. (Add 1 drop of DAB per ml of substrate) Lot #_____ Exp Date_____ New Kit: yes / no
- 15. Rinse the slides in tap water 3 minutes.
- 16. Counterstain with Harris Hematoxylin for 20 seconds.
- 17. Rinse the slides in tap water until water is clear.
- 18. Gently agitate slides in 1X Wash Buffer until they turn blue.
- 19. Dehydrate through the following solutions:

Solution	Repetitions	Time
95% Ethanol	1 time	3 minutes
100% Ethanol	3 times	3 minutes
Xylene	2 times	5 minutes

20. Coverslip

Updated 05/31/06